

A low profile, horizontally mounted Ussing chamber for imaging



- Custom round or slotted apertures to accommodate a variety of tissues sizes
- Excellent optical access
- Accommodates both upright and inverted microscopes

The RC-50 is a low profile, horizontally mounted Ussing chamber incorporating special features for confocal imaging. In particular, the chamber can be configured to use either gravity or pump driven perfusion. In addition, the apical (upper) chamber can be assembled in either an open or closed configuration. The basolateral chamber has been designed to facilitate placement and stretching of hard to handle tissue such as trachea. Suture pins are provided to act as anchor points for suture lines.

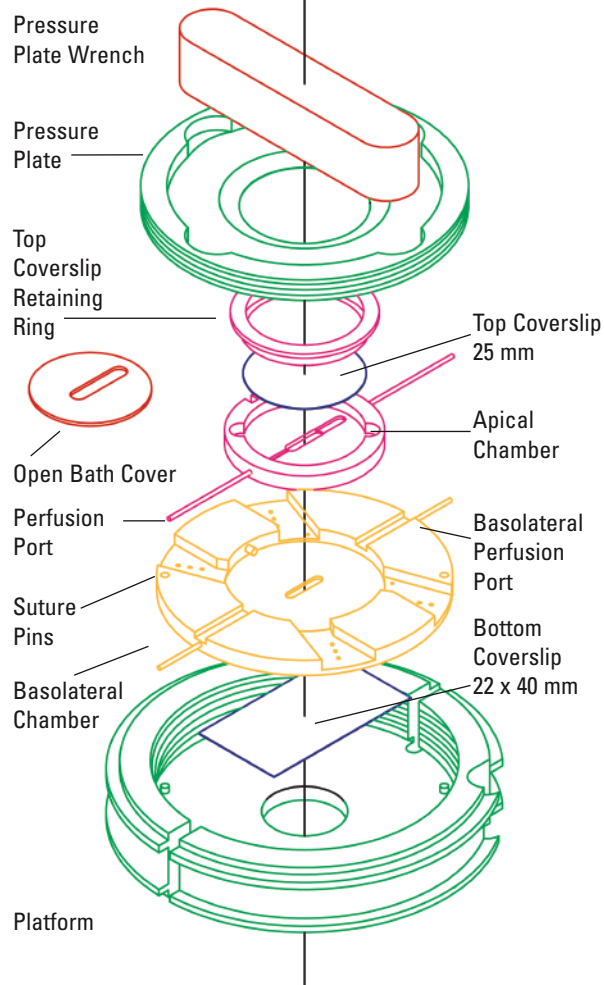
A #1 glass coverslip forms both the top and bottom of the chamber, allowing it to be used with both inverted and upright microscopes. While the chamber bottom is beveled to permit maximum access to the bottom coverslip, the chamber body can also be inverted to allow access to the other side. The viewing aperture in the chamber basolateral section is 17.7 mm in diameter and the viewing aperture in the chamber apical section is 22.8 mm.

The RC-50 includes a pair of resistive heater elements mounted to the chamber base. Heater elements are compatible with Warner TC-324B and TC-344B Heater Controllers.

The RC-50 requires the use of a Series 30 Stage Adapter for mounting onto a microscope, see next page.

The RC-50 is supplied with a package of #1 thickness bottom coverslips (CS-22/40, 22 x 40 mm, 100/pkg), a package of #1 thickness top coverslips (CS-25R, 25 mm round, 100/pkg), a suction tube with magnetic clamp, and 10 feet each of PE-90 and PE-160 polyethylene tubing.

RC-50



Specifications

Physical Dimensions	12.4 mm H x 82 mm D
Weight	<110 g, assembled with heaters
Platform and Pressure Plate	Aluminum, black anodized
Coverslip Plates	Polycarbonate
Input/Output Tubing	PE-90
Coverslips (#1) Top: 25 mm; Bottom: 22 x 40 mm	
Aperture (basolateral)	17.7 mm
Aperture (apical)	22.8 mm
Working Distance (basolateral)	0.375 mm
Working Distance (apical) includes coverslip	1.15 mm

Imaging Chambers for Transepithelial Studies (continued)

Order #	Model	Product
W3 64-0605	RC-50	Imaging Chamber for Transepithelial Studies, custom aperture
W3 64-0606	RC-50-R3	Imaging Chamber for Transepithelial Studies, 3 mm round
W3 64-0607	RC-50-R15	Imaging Chamber for Transepithelial Studies, 15 mm round
W3 64-0608	RC-50-S3X7	Imaging Chamber for Transepithelial Studies, 3 x 7 mm slot
W3 64-0609	RC-50-S2.5X10	Imaging Chamber for Transepithelial Studies, 2.5 x 10 mm slot
W3 64-0610	RC-50-D15X10	Imaging Chamber for Transepithelial Studies, 15 x 10 mm diamond

Replacement Imaging Chamber Inserts

W3 64-0611	BA-R3	RC-50 Imaging Chamber Round Insert, 3 mm diameter
W3 64-0612	BA-R15	RC-50 Imaging Chamber Round Insert, 15 mm diameter
W3 64-0613	BA-S3X7	RC-50 Imaging Chamber Slotted Insert, 3 x 7 mm slot
W3 64-0614	BA-S2.5X10	RC-50 Imaging Chamber Slotted Insert, 2.5 x 10 mm slot
W3 64-0615	BA-D15X10	RC-50 Imaging Chamber Diamond Insert, 15 x 10 mm diamond

Accessories and Replacement Parts

W3 64-0754	PE-90/10	Polyethylene Tubing
W3 64-0755	PE-160/10	Polyethylene Tubing
W3 64-0707	CS-22/40	Coverslips, 22 x 40 mm #1, 50/box
W3 64-0705	CS-25R	Coverslips, 25 mm, round

Series 30 Stage Adapters

W3 64-0322	SA-30NIK	Stage Adapter for Nikon Diaphot / TE200 / TE300
W3 64-0324	SA-30TMS9	Stage Adapter for Nikon TMS with 9 x 13 cm cutout
W3 64-0325	SA-30/OLY2	Stage Adapter for Olympus IMT-2 / IX-50 / IX-70 / BX-50WI
W3 64-0326	SA-30LZ	Stage Adapter for use with Zeiss Axiovert 211 x 230 Specimen Stage
W3 64-0327	SA-30KZ	Stage Adapter for Zeiss Axiovert 85 x 130 Mechanical (K) Stage
W3 64-0328	SA-30L3P	Stage Adapter for Leica Dmirbe/E with 3-Plate Mechanical Stage
W3 64-0329	SA-30PLI	Stage Adapter for Prior & Ludl Motorized Stage
W3 64-0377	SA-30GALVO Z	Stage Adapter for Leica Galvo Z Stage
W3 64-0379	SA-30UUZ	Stage Adapter for Zeiss LSM510
W3 64-0380	SA-30UU	Stage Adapter for use with Nikon E400/E600/E800
W3 64-1456	SA-30GALZi	Stage Adapter for Leica Galvo Z Inverted Stage